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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/780,817	02/09/2001	Peter Fredrik Janson	30566.118-US-01	9863

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EXAMINER

KE, PENG

ART UNIT	PAPER NUMBER
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2174

DATE MAILED: 04/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

09/780,817

Applicant(s)

JANSON, PETER FREDRIK

Examiner

Peng Ke

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. This action is responsive to communications: Amendment, filed on 2/9/04.

This action is final.

2. Claims 1-27 are pending in this application. Claims 1, 7, 20, and 19 are independent claims.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7, 10-16, and 19-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Hao et al. (US 6,377,287)

As per claim 1, Hao et al. teaches a computer-implemented method for synchronizing data between a graphical client and a server, comprising:

(a) downloading one or more root object nodes of a scene from the server to the graphical client (col. 3, lines 10-28, col.3, lines 42-56);

(b) intersecting bounding volumes for the object nodes with a view frustum in the graphical client to determine a set of visible and undefined object nodes (col. 3, lines 42-56); and

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(c) downloading the object nodes in the set of visible and undefined object nodes from the server to the graphical client (col.7 ,liens 35-51).

As per claim 2, Hao et al. teaches the method of claim 1, further comprising:

(d) determining whether the downloaded object nodes reference other object nodes; and

(e) repeating steps (b) and (c) for the other object nodes (col. 5, lines 28-44).

As per claim 3, Hao et al. the method of claim 2, further comprising:

repeating steps (d) and (e) until the set of visible and undefined object nodes is empty (col. 5, lines 7-28; Examiner infers dynamic hidden links to be all the possible undefined objects).

As per claim 4, Hao et al. teaches the method of claim 3, further comprising rendering the scene when the set of visible and undefined object nodes is empty (col. 5, lines 28-60; It is inherent that, only after the status in reference to the root node for all the other nodes are determined, the system can generate the appropriate display for the user).

As per claim 5, Hao et al. teaches the method of claim 4, further comprising repeating steps (a) through (f) when a camera changes the scene (col. 5, lines 8-35; Examiner infers navigating the secondary node by linking on a child node to be a camera changing the scene).

As per claim 6, Hao et al. teaches the method of claim 1, wherein the downloading step (a) comprises downloading descriptions of the root object nodes from the server to the graphical client, wherein the descriptions include references to other object nodes comprising unique persistent identifiers for the referenced object nodes with their associated bounding volumes (col. 7, lines 23-35; Examiner infers to frequency of navigation to be unique persistent identifiers for the references to other object nodes with their associated bounding volumes).

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As per claim 7, Hao et al. teaches the method of claim 1, wherein the downloading step (a) comprises downloading descriptions of the object nodes from the server to the graphical client, wherein the descriptions include references to other object nodes comprising unique persistent identifiers for the referenced object nodes with their associated bounding volumes (col. 7, lines 23-35; Examiner infers to frequency of navigation to be descriptions include references to other object nodes).

As per claim 10, it is rejected with same rationale as claim 1. (see rejection above)

As per claim 11, it is of the same scope as claim 2. (see rejection above)

As per claim 12, it is of the same scope as claim 3. (see rejection above)

As per claim 13, it is of the same scope as claim 4. (see rejection above)

As per claim 14, it is of the same scope as claim 5. (see rejection above)

As per claim 15, it is of the same scope as claim 6. (see rejection above)

As per claim 16, it is of the same scope as claim 7. (see rejection above)

As per claim 19, it is rejected with same rationale as claim 1. (see rejection above)

As per claim 20, it is of the same scope as claim 2. (see rejection above)

As per claim 21, it is of the same scope as claim 3. (see rejection above)

As per claim 22, it is of the same scope as claim 4. (see rejection above)

As per claim 23, it is of the same scope as claim 5. (see rejection above)

As per claim 24, it is of the same scope as claim 6. (see rejection above)

As per claim 25, it is of the same scope as claim 7. (see rejection above)

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8, 17, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hao et al. (US 6,377,287) in view Schmeidler et al. (US 6,374,402).

As per claim 8, Hao et al. teaches the method of claim 1. However he fails to teach wherein the server is a stateless server. Schmeidler et al. teaches using a stateless server (col. 22, lines 21-33). It would have been obvious to an artisan at the time of the invention to include Schmeidler et al.'s teaching with Hao et al.'s method in order to allow the server to be easily scaled by deploying more server machines.

As per claim 17, it is of the same scope as claim 8. (see rejection above)

As per claim 26, it is of the same scope as claim 8. (see rejection above)

Claims 9, 18, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hao et al. (US 6,377,287) in view Berger et al. (US 6,414,693).

As per claim 9, Hao et al. teaches the method of claim 1. However he fails to wherein the graphical client includes a cache teach. Berger et al. teaches using a cache on the client side (col. 8, line 68, col. 9, lines 1-2). It would have been obvious to an artisan at the time of the invention

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to include Berger et al.'s teaching with Hao et al.'s method in order to allow quick access to frequently used data.

As per claim 18, it is of the same scope as claim 9. (see rejection above)

As per claim 27, it is of the same scope as claim 9. (see rejection above)

***Response to Argument***

Applicant's arguments filed on 4/6/04 have been fully considered but they are not persuasive:

Applicant's argument includes the following:

A) Hao fails to teach or suggest downloading one or more root object nodes of a scene from the server to the graphical client.

B) Hao fails to teach or suggest a set of visible and undefined object nodes.

Examiner disagrees:

A) Hao teaches allowing users to access data stored on server through a client terminal using HTML pages and a Web Browser that requires the user to download the HTML page on the client terminal before viewing. (col. 7, lines 35-51)

B) Hao teaches mapped and unmapped objects. (col. 5, lines 7-28; Examiner interprets mapped and unmapped objects to be visible and undefined objects)

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peng Ke whose telephone number is (703) 305-7615. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine L Kincaid can be reached on (703) 308-0640. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

*Kristine Kincaid*  
KRISTINE KINCAID  
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Peng Ke